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SUBJECT: EVALUATION OF MISSION BU Q00640 FLOWN 11 FEB 1968

~~1. Mission Q640 Flown on 11 February~~

This mission employed camera unit p. number 59.
Vehicle number is unknown. Processing
was accomplished by 67th Recon Tech SQ

2 Original Negative

A. Exposure/Resolution: The
exposure was adequate
~~(would have got the best of the mission be endangered~~
~~by using that train. Similarly)~~
The resolution which is good at
the beginning of the mission leaves

DECLASS REVIEW by NIMA/DOD
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[illegible] are ~~not~~ nearly

100 percent cloud cover and therefore

ceiling is not apparent until from 1204.

The entire flare [illegible] and

[illegible] is veiled

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B. Camera Operation: Banding due to irregular slit movement is present throughout the mission. This banding causes a minor degradation at the ends of the format where the slit is traveling toward the take up end and only at the take up end of the format where slit is leaving toward the supply end. Camera Positions and the frame numbers are erratically recorded throughout the mission. From the beginning of the operational portion of the mission [illegible] frame 23 the frame

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O 226 8 July 1968

Veiling on:

A) Fwd part of window

B) Fwd part of lens

C) Upper part of mirror.

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BUQ226

July 1568

Veiling 644/648

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91 the camera is in one position only. Throughout the mission the same camera position is recorded on two succeeding frames although the camera position has actually changed. These "same position" pairs are spaced irregularly. On the first frame of a pair in which the data chamber records same camera position, the imagery is badly smeared on half the format. On the 2L, 2R, and V the supply side of format is smeared. On the 1L and 1R the take up reel is smeared.

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The vehicle number was not recorded on the
written data chamber.



C. Other Degradations: A 1.1 inch
wide band of plus density streaks
is located 0.7 inch from the non data
edge of the film and runs parallel
to the major axis throughout the
mission. A plus density streak is
located 3.7 inch from non data edge
and runs parallel to the major axis
throughout the mission. A series of plus
density dots spaced 6.3 inches apart
and located 4.5 inches from the non data
edge begins in frame 1125 and runs
throughout the mission.

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On frames 119 thru 127 a fine optics density line is located 2.2 inches from the nose data edge. It appears also on the next seven frames. Frames 1332, 1333, 1334 and 1514 have wavering optics density streaks. Frame 668 has several spots caused by water and/or chemicals which resulted in emulsion lifts. ~~of the emulsion.~~ Frame 1204 to 1210 have low contrast and a grainy appearance due to a ~~[illegible]~~ coating of the optics.

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D. The last titled frame in the mission is 1710

3. Evaluation of Duplicate POSITIVE

A. Random spin briefly spot with a previous search centers are prevalent throughout the mission. An orange colored stain cloud is present in frames 1142, 1143, 1144, and 1145.

B. PI suitability ranges from good to poor due to the veiling

C. Clouds obscure or degrade approximately 50% of the entire mission

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# BUQ Fault Book

| | |
|---|---|
| Frame 92 | Severe Shutter Streak |
| " | |
| Frame 93 | Sev. Shut. Strk. |
| Frame 593 | Veiling + dew lines |
| Frame 597 | Veiling + dew lines |
| Frame 601 | Veiling + dew lines |
| Frame 1179 | Good frame |
| Frame 1355 | Good frame |
| Frame 1608 | Good Frame |
| Frame 1516 | Overexposed |
| Frame 1547 | Overexposed |

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| | | | |
|---|---|---|---|
| Veiling | Q623 | 3 Sept. '67 | 593, 597, 601 |
| Shutter Spurts | Q642 | 19 Dec. '67 | 401, 402 |
| Sewer " - " | Q615 | 1 Aug. '67 | 92, 93 |
| Overexposure | Q615 | 1 Aug. '67 | 1546, 1547 |
| Whipping & crimping | Q619 | 2 Aug. '67 | 1792 |
| Minus density Camera | Q634 | 27 Sept. '67 | |
| Good Frames | Q641 | 21 Dec. '67 | 1179, 1355, 1609 |

$$\frac{|I|I+1}{3\ 4}$$

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# FAULT BOOK

## LISTING

| Mission | Date | Anomaly |
|---|---|---|
| ~~Q619~~ | ~~2Aug67~~ | ~~Frame 1064 Fog on window~~ |
| Q623 | 3Sep67 | frames 593, 597, 601 – Fog on window also frame 666 |
| Q642 | 19 DEC67 | FRAMES 401-402 Banding caused by camera shutter slowing. Also shows difference in banding when shutter moves in one direction versus banding when it moves in opposite direction |
| Q643 | 28 DEC67 | FRAME 031 and also Weaving (+ density) Scratches Tears |

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| | | NEED |
|---|---|---|
| BU Q 224 | 30 Sept. 68 | complete |
| BU Q 242 | 8 Oct. 68 | can # 2 |
| BU Q 243 | 9 Dec. 68 | complete |
| BU Q 243 | 18 Dec. 68 | complete |

*(when it becomes available)

25X1

[redacted]

APSD/TSSG

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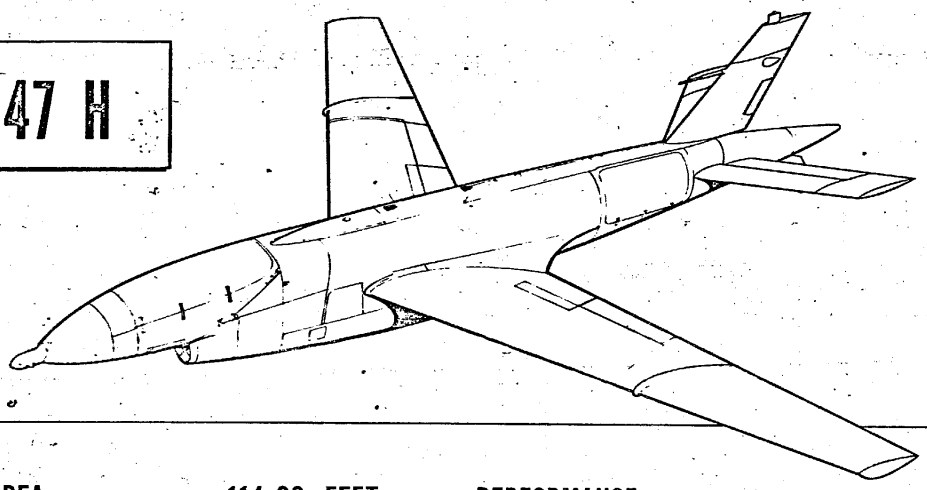
# 147 H



| | |
|---|---|
| WING AREA | 114 SQ. FEET |
| LENGTH | 28.89 FEET |
| SPAN | 32 FEET |
| GROSS WEIGHT | 3740.8 LBS. |
| FUEL CAPACITY | 1369.5 LBS. |
| RANGE (MAX) | 2400 N.M. |
| * ALTITUDE (at 200 N.M.) | 60,800 FT. |
| ENGINE S.L.S.T. | 1920 LBS. |

## PERFORMANCE

HR-338A

RESOLUTION:

- 50 LINES/mm = 2.5 FT. GROUND DISTANCE AT NADIR

COVERAGE:

- LONGITUDINAL = 806 N.M.
- LATERAL = 23 N.M.
- ALONG TRACK DISTANCE PER FRAME = 4.25 N.M.

* FUEL OUT ALTITUDE = 69,000 FT.



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BUMBLE BUG

HR-338

| MISSION RT. NUMBER | DATE | VEHICLE | CAMERA | CLOUD COVER | VEILING | SHUTTER STUTTER | EXPOSURE | RESOLUTION | MISSION QUALITY | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| Q615 | 1Aug67 | H-14 | 25 | 30% | No | EXTREME | Under TO OVER | POOR | POOR | "Spiked" PATTERN ACROSS FORMATE |
| Q619 | 2Aug67 | H-20 | NOT GIVEN | NO ESTIMATE | 192R's EXTREME | Slight | Adequate | POOR | POOR | Less than 200 FRAMES useable imagery |
| Q621 | 30Aug67 | | | | | | | | | NO EVALUATION DONE Cable traffic indicates CAMERA malfunc. |
| Q623 | 3Sept67 | H-21 | 25 | 30% | Fwd part of frame | Slight | Under TO OVER | Good to POOR | FAIR | Positive contains minus density band 1" wide in PART 1 |
| Q634 | 27Sept67 | H-29 | not given | 98% | No | moderate | Could not be determined | | POOR | |
| Q639 | 29Sept67 | NOT given | | 50% | Moderate | moderate | Adequate TO Under | POOR | POOR | |
| Q648 | 7Dec67 | H-22 | not given | 50% | 50% of frame | Slight | Adequate TO Under | Good TO POOR | POOR | |
| Q642 | 19Dec67 | H-22 | NOT given | 35% | No | Moderate | Adequate | FAIR TO POOR | FAIR TO POOR | |
| Q641 | 21Dec67 | H-25 | 19 | 30% | very slight | very slight | Good | Good | Good | BEST MISSION TO DATE |
| Q643 | 28Dec67 | H-22 | 47 | 50% | moderate | Moderate | MEDium TO Under | FAIR TO POOR | FAIR TO POOR | |
| Q637 | 4Jan68 | H-25 | 47 | 5% | No | Moderate | Adequate | Good | Good | NOT quite AS good AS Flight 21DEC67 |
| Q643 | 11Jan68 | H-34 | 36 | 95% | Slight | Moderate | Adequate TO Under | FAIR | FAIR | |

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|---|---|---|---|---|---|---|---|---|---|---|
| Q640 | 11 Feb 68 | NOT GIVEN | 39 | 50% | EXCESSIVE TO MODERATE | MODERATE | ADEQUATE | GOOD TO FAIR | GOOD TO POOR | POSITION INDICATOR MALFUNCTIONED |

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